

AMENDMENTS TO THE CLAIMS:

Please cancel claims 9, 17, 22, 26 and 29-31, and amend claims 8, 34 and 35. This listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

- 1-7. (Canceled)
8. (Currently Amended) An isolated nucleic acid encoding a polypeptide comprising ~~an amino acid sequence at least 70% identical to the sequence of~~ SEQ ID NO:1; ~~wherein the polypeptide is a transporter of an organic cation.~~
9. (Canceled)
10. (Previously Presented) An isolated nucleic acid encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:1, with one to 30 conservative amino acid substitutions, wherein the polypeptide is a transporter of an organic cation.
11. (Previously Presented) An isolated nucleic acid that hybridizes under stringent conditions to a probe, wherein:
 - the sequence of the probe consists of the complement of SEQ ID NO:2;
 - the stringent conditions comprise hybridization at 68 °C followed by washing in 2 X SSC/0.1% SDS for 20 minutes at room temperature and twice in 0.1 X SSC/0.1% SDS for 20 minutes at 50 °C; and
 - the isolated nucleic acid encodes a polypeptide that is a transporter of an organic cation.
12. (Canceled)
13. (Previously Presented) The nucleic acid of claim 11, wherein the amino acid sequence of the polypeptide comprises SEQ ID NO:1.
14. (Canceled)
15. (Canceled)
16. (Original) A vector comprising the nucleic acid of claim 8.
17. (Canceled)
18. (Original) A vector comprising the nucleic acid of claim 10.
19. (Original) A vector comprising the nucleic acid of claim 11.
20. (Previously Presented) A vector comprising the nucleic acid of claim 13.

21. (Original) A cultured host cell comprising the nucleic acid of claim 8.
22. (Canceled)
23. (Original) A cultured host cell comprising the nucleic acid of claim 10.
24. (Original) A cultured host cell comprising the nucleic acid of claim 11.
25. (Previously Presented) A cultured host cell comprising the nucleic acid of claim 13.
26. (Canceled)
27. (Original) A method of producing a polypeptide, the method comprising isolating the polypeptide from the cultured host cell of claim 21.
- 28-31. (Canceled)
32. (Previously Presented) The nucleic acid of claim 10, wherein the sequence of the encoded polypeptide comprises the amino acid sequence of SEQ ID NO:1, with up to 10 conservative amino acid substitutions.
33. (Withdrawn) A method of screening compounds for the ability to be transported by an organic cation transporter, comprising:
 - (a) introducing the isolated nucleic acid of claim 8 into a cell;
 - (b) expressing the polypeptide in the cell;
 - (c) exposing the cell to a compound; and
 - (d) determining the presence of the compound in the cell as an indication of the ability of the compound to be transported by the polypeptide into the cell.
34. (Currently Amended, Withdrawn) The method of claim [[36]] 33, wherein the compound is a drug.
35. (Currently Amended, Withdrawn) The method of claim [[37]] 33, wherein the compound is a carcinostatic agent.
36. (Previously Presented) An isolated nucleic acid encoding a polypeptide consisting of the sequence of SEQ ID NO:1.